```
Welcome to DialogClassic Web(tm)
 Dialog level 05.07.12D
Last logoff: 19oct05 10:06:07
Logon file001 20oct05 12:50:55
          *** ANNOUNCEMENT ***
                   ***
-- UPDATED: Important Notice to Freelance Authors--
See HELP FREELANCE for more information
NEW FILES RELEASED
***Inspec (File 202)
***Physical Education Index (File 138)
***Computer and Information Systems Abstracts (File 56)
***Electronics and Communications Abstracts (File 57)
***Solid State and Superconductivity Abstracts (File 68)
***ANTE: Abstracts in New Technologies (File 60)
RELOADS COMPLETED
*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)
is now available online.
RESUMED UPDATING
***ERIC (File 1)
Chemical Structure Searching now available in Prous Science Drug
Data Report (F452), Prous Science Drugs of the Future (F453), IMS R&D Focus (F445/95
Facts (F390), and Derwent Chemistry Resource (F355).
                   ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>> of new databases, price changes, etc.
                   ****
KWIC is set to 50.
HILIGHT set on as ' '
 * * *
File
      1:ERIC 1966-2005/Sep 30
       (c) format only 2005 Dialog
        1: The database is now current with Monthly Updates.
      Set Items Description
          ----
                 ______
Cost is in DialUnits
B 155, 5, 73
       20oct05 12:51:08 User259876 Session D811.1
                     0.232 DialUnits File1
            $0.81
     $0.81 Estimated cost File1
     $0.05 INTERNET
     $0.86 Estimated cost this search
     $0.86 Estimated total session cost 0.232 DialUnits
SYSTEM: OS - DIALOG OneSearch
  File 155:MEDLINE(R) 1951-2005/Oct 19
         (c) format only 2005 Dialog
         5:Biosis Previews(R) 1969-2005/Oct W3
  File
        (c) 2005 BIOSIS
  File 73:EMBASE 1974-2005/Oct 20
         (c) 2005 Elsevier Science B.V.
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Set Items Description
                 ______
?
S (MESENCHYMAL (W) (STEM OR PROGENITOR OR PRECURSOR)) (S) ((CORD OR PLACENTA OR NEWB
          50925 MESENCHYMAL
         386842 STEM
          76503 PROGENITOR
         241267 PRECURSOR
         365747 CORD
         124963 PLACENTA
         731386 NEWBORN
         6191143 BLOOD
     S1
            209 (MESENCHYMAL (W) (STEM OR PROGENITOR OR PRECURSOR)) (S)
                  ((CORD OR PLACENTA OR NEWBORN) (W) BLOOD)
?
S (SOMATIC (W) STEM (W) CELL?) (S) (CORD (W) BLOOD)
Processing
         150172 SOMATIC
         386842 STEM
         9749936 CELL?
         365747 CORD
         6191143 BLOOD
         32 (SOMATIC (W) STEM (W) CELL?) (S) (CORD (W) BLOOD)
     S2
?
S S1 OR S2
            209 S1
             32 S2
      s3
            229 S1 OR S2
S S3 AND (TREATMENT OR THERAPY OR TRANSPLANT OR GRAFT)
            229 S3
         4925852 TREATMENT
        5615975 THERAPY
         183600 TRANSPLANT
         426272 GRAFT
     S4
             93 S3 AND (TREATMENT OR THERAPY OR TRANSPLANT OR GRAFT)
?
S S4 AND (CARDIAC OR HEART OR (SMOOTH (W) MUSCLE))
             93 S4
         818147 CARDIAC
        1944294 HEART
         365345 SMOOTH
        1397059 MUSCLE
         258254 SMOOTH (W) MUSCLE
            16 S4 AND (CARDIAC OR HEART OR (SMOOTH (W) MUSCLE))
?
RD
...completed examining records
         9 RD (unique items)
?
T S6/3, K/ALL
 6/3,K/1
             (Item 1 from file: 155)
```

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

18569981 PMID: 16159872

Cell transplantation improves ventricular function after a myocardial infarction: a preclinical study of human unrestricted somatic stem cells in a porcine model.

Kim Byung-Ok; Tian Hai; Prasongsukarn Kriengchai; Wu Jun; Angoulvant Denis; Wnendt Stephan; Muhs Andreas; Spitkovsky Dimitry; Li Ren-Ke

Department of Surgery, Toronto General Research Institute, Toronto General Hospital, Toronto, Ontario, Canada.

Circulation (United States) Aug 30 2005, 112 (9 Suppl) pI96-104, ISSN 1524-4539 Journal Code: 0147763

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: In Process

... restoration of ventricular function after an extensive myocardial infarction, but the optimal cell type remains controversial. Human unrestricted somatic stem cells (USSCs) isolated from umbilical cord blood have great potential to differentiate into myogenic cells and induce angiogenesis. The present study evaluated the effect of USSCs on myocardial regeneration and improvement of heart function after myocardial infarction in a porcine model. METHOD AND RESULTS: The distal left anterior descending artery of Yorkshire pigs (30 to 35 kg) was...

(n=8 per group). Pigs were immunosuppressed by daily administration of cyclosporin A. At 4 weeks after transplantation, MIBI and echocardiography were repeated and heart function was also assessed with a pressure-volume catheter. The infarcted myocardium and implanted cells were studied histologically. MIBI showed improved regional perfusion (P<0.05) and wall motion (P<0.05) of the infarct region in the transplant group compared with the control. Ejection fraction evaluated by both MIBI and echocardiography decreased in the control group but increased in the transplant group (P<0.01). Scar thickness of the transplant group was higher than the control. The grafted cells were detected 4 weeks after transplantation by both immunohistochemistry and in situ hybridization. CONCLUSIONS: Engrafted USSCs were detected in the infarct region 4 weeks after cell transplantation, and the implanted cells improved regional and global function of the porcine heart after a myocardial infarction. This study suggests that the USSC implantation will be efficacious for cellular cardiomyoplasty.

6/3,K/2 (Item 2 from file: 155)

DIALOG(R) File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

18385384 PMID: 16045817

Mesenchymal stem cells derived from human placenta suppress allogeneic umbilical cord blood lymphocyte proliferation.

Li Chang Dong; Zhang Wei Yuan; Li He Lian; Jiang Xiao Xia; Zhang Yi; Tang Pei Hsien; Mao Ning

Beijing Gynecology and Obstetrics hospital, Affiliate of Capital University of Medical Sciences, Beijing 100026, China.

Cell research (China) Jul 2005, 15 (7) p539-47, ISSN 1001-0602 Journal Code: 9425763 Publishing Model Print Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM Record type: In Process

## Mesenchymal stem cells derived from human placenta suppress allogeneic umbilical cord blood□ lymphocyte proliferation.□

... hematopoietic cells, which uniformly expressed CD29, CD44, CD73, CD105, CD166, laminin, fibronectin and vimentin while being negative for expression of CD31, CD34, CD45 and alpha-smooth muscle actin. Most importantly, immuno-phenotypic analyses demonstrated that these cells expressed class I major histocompatibility complex (MHC-I), but they did not express MHC-II molecules. Additionally these cells could suppress umbilical cord blood (UCB) lymphocytes proliferation induced by cellular or nonspecific mitogenic stimuli. This strongly implies that they may have potential application in allograft transplantation. Since placenta and UCB are homogeneous, the MSC derived from human placenta can be transplanted combined with hematopoietic stem cells (HSC) from UCB to reduce the potential graft -versus-host disease (GVHD) in recipients.

#### 6/3,K/3 (Item 3 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

17391829 PMID: 15277707

## Skeletal myogenic differentiation of mesenchymal stem cells isolated from human umbilical cord blood $\square$ .

Gang Eun Ji; Jeong Ju Ah; Hong Seung Hyun; Hwang Soo Han; Kim Seong Whan; Yang Il Ho; Ahn Chiyoung; Han Hoon; Kim Hoeon

Research Institute of Biotechnology, Histostem Co. 518-4 Taijul Bldg, Doonchundong, Kangdong-gu, Seoul 134-060, Korea.

Stem cells (Dayton, Ohio) (United States) 2004, 22 (4) p617-24, ISSN 1066-5099 Journal Code: 9304532

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

## Skeletal myogenic differentiation of mesenchymal stem cells isolated from human umbilical cord blood[]. $\Box$

Human umbilical cord blood (UCB) has been regarded as an alternative source for cell transplantation and cell **therapy** because of its hematopoietic and nonhematopoietic (mesenchymal) potential. Although there has been debate about whether **mesenchymal stem** cells (MSCs) are invariably present in UCB, several reports showed that MSC-like cells could be consistently derived from human UCB and, moreover, could differentiate

... cell culture expansion, UCB-derived mononuclear cells gave rise to adherent layers of fibroblast-like cells expressing MSC-related antigens such as SH2, SH3, alpha- smooth muscle actin, CD13, CD29, and CD49e. More important, when these UCB-derived MSCs were incubated in promyogenic conditions for up to 6 weeks, they expressed myogenic...

#### 6/3,K/4 (Item 4 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

15033263 PMID: 14579923

Human cord blood-derived mesenchymal stem cells home and survive in the marrow of immunodeficient mice after systemic infusion.

Erices Alejandro A; Allers Carolina I; Conget Paulette A; Rojas Cecilia V; Minguell Jose J

Programa Terapias Genicas y Celulares, INTA, Universidad de Chile, Santiago, Chile. aerices@uec.inta.uchile.cl

Cell transplantation (United States) 2003, 12 (6) p555-61, ISSN 0963-6897 Journal Code: 9208854

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

## Human cord blood-derived mesenchymal stem cells home and survive in the marrow of immunodeficient mice after systemic infusion.

... of mesenchymal stem cells (MSC), which upon commitment and maturation develop into several mesenchymal phenotypes. Recently, we have described the presence of MSC in human **cord blood** (cbMSC) and informed that their properties are the same as those for MSC obtained from adult bone marrow. In this study we have investigated the...

... recipient marrow and also suggest a mesenchymal-orientated fate of engrafted cells, because human DNA was also detected in cells of other recipient tissues, like **cardiac** muscle, teeth, and spleen.

Descriptors: \*Bone Marrow-surgery-SU; \*Cord Blood Stem Cell Transplantation-methods-MT; \*Fetal Blood-cytology-CY; \* Graft Survival --immunology-IM; \*Immunologic Deficiency Syndromes-therapy --TH; \*Mesenchymal Stem Cell Transplantation-methods-MT

#### 6/3,K/5 (Item 5 from file: 155)

DIALOG(R) File 155: MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

13900623 PMID: 11588036

## Identification of mesenchymal stem/progenitor cells in human first-trimester fetal blood, liver, and bone marrow.

Campagnoli C; Roberts I A; Kumar S; Bennett P R; Bellantuono I; Fisk N M Department of Maternal and Fetal Medicine, Institute of Reproductive and Developmental Biology, Imperial College School of Medicine, London, United Kingdom. c.campagnoli@ic.ac.uk

Blood (United States) Oct 15 2001, 98 (8) p2396-402, ISSN 0006-4971 Journal Code: 7603509

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

...doubling of 50.3 +/- 4.5. In their undifferentiated state, fetal blood MSCs were CD29(+), CD44(+), SH2(+), SH3(+), and SH4(+); produced prolyl-4-hydroxylase, alpha- **smooth muscle** actin, fibronectin, laminin, and vimentin; and were CD45(-), CD34(-), CD14(-), CD68(-), vWF(-), and HLA-DR(-). Fetal blood MSCs cultured in adipogenic, osteogenic, or chondrogenic media differentiated, respectively, into adipocytes, osteocytes, and chondrocytes. Fetal blood MSCs supported the proliferation and differentiation of **cord blood** CD34(+) cells in long-term culture.

```
MSCs were also detected in first-trimester fetal liver (11.3 +/- 2.0/10(6)
nucleated cells) and bone...
          marrow, fetal liver, and fetal bone marrow circulate in
... bone
first-trimester human blood and may provide novel targets for in utero
cellular and gene therapy
  6/3, K/6
              (Item 1 from file: 5)
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200500078408
0015171343
 Rapid neural differentiation of human cord blood-derived mesenchymal
  stem cells
AUTHOR: Jeong Ju Ah; Gang Eun Ji; Hong Seung Hyun; Hwang Soo Han; Kim Seong
  Whan; Yang Il Ho; Ahn Chiyoung; Han Hoon; Kim Hoeon (Reprint)
AUTHOR ADDRESS: Biotechnol Res Inst, Histostem Co, 518-4 Taijul Bldg,
  Seoul, 134060, South Korea**South Korea
AUTHOR E-MAIL ADDRESS: hoeonkim@seoulcord.co.kr
JOURNAL: Neuroreport 15 (11): p1731-1734 August 6, 2004 2004
MEDIUM: print
ISSN: 0959-4965 (ISSN print)
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English
 Rapid neural differentiation of human cord blood-derived mesenchymal
  stem cells
ABSTRACT: Human umbilical cord blood (UCB) contains hematopoietic stem
  cells (HSCs) and mesenchymal stem cells (HSCs), both of which are
  regarded as valuable sources for cell transplantation and cell therapy
  Adherent cells expressing MSCs-related antigens such as SH2, CD13, CD29,
  and ASMA, have been isolated from a mononuclear cell fraction of human
  UCB. Under...
DESCRIPTORS:
  ...DISEASES: nervous system disease, immunology,
                                                    therapy
  CHEMICALS & BIOCHEMICALS:
                             ASMA {anti- smooth
                                                   muscle antibody...
  ...METHODS & EQUIPMENT: cell therapy --...
...stem cell therapy --
              (Item 2 from file: 5)
  6/3,K/7
DIALOG(R)File
              5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
0014379950
            BIOSIS NO.: 200300336693
 Human Adipose-Derived Mesenchymal and Adherent Cord Blood Stem Cell
 Trafficking Studies Are Facilitated by Novel Xenotransplant Models.
AUTHOR: Meyerrose Todd E (Reprint); Hofling A Alex (Reprint); Ugarte Daniel
  De (Reprint); Rao Manoj (Reprint); Cordonnier Taylor (Reprint); Rosova
  Ivana (Reprint); Eagon J Chris (Reprint); Creer Michael (Reprint);
  Johnson Corey (Reprint); Herrbrich Phillip (Reprint); Hedrick Marc A
  (Reprint); Sands Mark S (Reprint); Nolta Jan A (Reprint)
```

AUTHOR ADDRESS: Department of Internal Medicine, Division of Oncology, Washington University School of Medicine, St. Louis, MO, USA\*\*USA JOURNAL: Blood 100 (11): pAbstract No. 1995 November 16, 2002 2002

MEDIUM: print

CONFERENCE/MEETING: 44th Annual Meeting of the American Society of Hematology Philadelphia, PA, USA December 06-10, 2002; 20021206

SPONSOR: American Society of Hematology

ISSN: 0006-4971

DOCUMENT TYPE: Meeting; Meeting Poster; Meeting Abstract

RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: We investigated the potential of human adipose-derived mesenchymal stem cells (AMSC) and rapidly growing CD45- cord blood adherent cells (adCB) to traffic into various tissue compartments using two novel murine xenotransplant models; the nude/NOD/SCID mouse (Nolta lab) and the B...

...conditioning. In contrast, human AMSC-derived cells were detected for up to 90 days post-transplantation in the liver, lung, spleen, intestine, kidney, bladder, fat, cardiac and skeletal muscle, as well as in the right and left hemispheres of the brain, in immune deficient mice that had received the same conditioning...

...to multiple tissues, including the brain, following various routes of administration. The combination of these potentials makes AMSC an excellent avenue for cell-based gene **therapy** and for cellular representative medicine therapies for a wide range of tissues.

DESCRIPTORS:

...ORGANISMS: PARTS ETC: cardiac muscle ...METHODS & EQUIPMENT: gene therapy --

6/3,K/8 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0013127402 BIOSIS NO.: 200100299241

Preliminary characterization of the surface staining of placental derived adherent cells: A potential new source of stroma for umbilical cord blood (UCB) expansion

AUTHOR: Jaroscak J (Reprint); Smith T (Reprint); Haynesworth S (Reprint); Laughlin M J (Reprint); Kurtzberg J; Gerson S L (Reprint)

AUTHOR ADDRESS: Pediatric and Medicine Heme/Onc, Biology, Case Western Reserve, University, Cleveland, OH, USA\*\*USA

JOURNAL: Blood 96 (11 Part 2): p150b November 16, 2000 2000

MEDIUM: print

CONFERENCE/MEETING: 42nd Annual Meeting of the American Society of Hematology San Francisco, California, USA December 01-05, 2000; 20001201

SPONSOR: American Society of Hematology

ISSN: 0006-4971

DOCUMENT TYPE: Meeting; Meeting Abstract

RECORD TYPE: Abstract LANGUAGE: English

ABSTRACT: Stromal-based ex-vivo expansion of UCB provides a potential method to overcome the limited **graft** cell dose for adult recipients. The benefit of stromal-based expansion compared to cytokine-based expansion is maintenance of primitive stem and progenitor cells during...

...progenitor cell markers (CD45), adhesion molecules (PECAM), HLA-Class I (HLA-ABC), endothelial cell markers (von Willebrand Factor) and tissue specific stains (P-Cadherin, alpha **smooth muscle** actin, and vimentin). Placental derived adherent cells (N=3), mesenchymal stem cells

(N=2), human umbilical vein endothelial cells (N=1), and human umbilical vcin smooth muscle cells (N=1) were stained for surface expression of these markers. For mesenchymal stem cells and placental derived adherent cells, there appears to be no...

...replated. As expected, the placental derived adherent cells are heterogeneous in phenotype, and clusters or individual cells stained positively for SH2, SH3, SH4, and alpha **smooth muscle** actin. The placental derived adherent cells do not express CD45, PECAM, or von Willebrand Factor, suggesting that they do not contain hematopoietic or endothelial cells...

...adherent cells surface markers is an important first step in the characterization of this novel source of adherent cells for stromal-based expansion of umbilical cord blood .

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6/3,K/9 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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12750404 EMBASE No: 2004344525

Rapid neural differentiation of human cord blood -derived mesenchymal stem cells

Ju A.J.; Eun J.G.; Seung H.H.; Soo H.H.; Seong W.K.; Il H.Y.; Ahn C.; Han H.; Kim H.

H. Kim, Research Institute of Biotechnology, Histostem Co., 518-4 Taijul Bldg., Doonchun-dong, Kangdong-gu, Seoul-134-060 South Korea

AUTHOR EMAIL: hoeonkim@seoulcord.co.kr

NeuroReport ( NEUROREPORT ) (United Kingdom) 06 AUG 2004, 15/11 (1731-1734)

CODEN: NERPE ISSN: 0959-4965 DOCUMENT TYPE: Journal; Article

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 12

Rapid neural differentiation of human cord blood -derived mesenchymal stem cells

Human umbilical cord blood (UCB) contains hematopoietic stem cells (HSCs) and mesenchymal stem cells (MSCs), both of which are regarded as valuable sources for cell transplantation and cell therapy. Adherent cells expressing MSCs-related antigens such as SH2, CD13, CD29, and ASMA, have been isolated from a mononuclear cell fraction of human UCB. Under... MEDICAL DESCRIPTORS:

mesenchyme cell; stem cell; mononuclear cell; cell fractionation; cell
structure; reverse transcription polymerase chain reaction;
immunofluorescence; smooth muscle ; human; human tissue; article;
priority journal
?

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Set
        Items
                Description
                (MESENCHYMAL (W) (STEM OR PROGENITOR OR PRECURSOR)) (S) ((-
S1
          209
             CORD OR PLACENTA OR NEWBORN) (W) BLOOD)
S2
           32
                (SOMATIC (W) STEM (W) CELL?) (S) (CORD (W) BLOOD)
S3
          229
                S1 OR S2
S4
           93
                S3 AND (TREATMENT OR THERAPY OR TRANSPLANT OR GRAFT)
S5
           16
                S4 AND (CARDIAC OR HEART OR (SMOOTH (W) MUSCLE))
56
            9
                RD (unique items)
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?
S S4 NOT S5
              93 S4
              16 S5
              77 S4 NOT S5
     S7
?
RD
...examined 50 records (50)
...completed examining records
              49 RD (unique items)
?
S S8 AND (REVIEW? OR PERSPECTIVE?)
>>>File 5 processing for REVIEW? stopped at REVIEW MOUSE AXONAL TRANSPORT
   SYNAPTIC TRANSMI
              49
         2219285 REVIEW?
         189607 PERSPECTIVE?
              6 S8 AND (REVIEW? OR PERSPECTIVE?)
?
T S9/3, K/ALL
              (Item 1 from file: 155)
  9/3, K/1
DIALOG(R) File 155: MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
18641102
           PMID: 16181071
Neural induction of adult bone marrow and umbilical cord stem cells.
  Ortiz-Gonzalez Xilma R; Keene C Dirk; Verfaillie Catherine M; Low Walter
  Department of Neurosurgery, Graduate Program in Neuroscience, Stem Cell
Institute, University of Minnesota Medical School, Minneapolis, 55455, USA.
                                              Jul 2004, 1 (3) p207-13,
  Curr Neurovasc Res (United Arab Emirates)
               Journal Code: 101208439
ISSN 1567-2026
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
 Main Citation Owner: NLM
  Record type: In Process
```

... neural potential of readily-available and accessible adult bone marrow and umbilical cord blood stem cells, substantial ethical and technical dilemmas may be circumvented. This review will focus on the potential of adult bone marrow derived cells and umbilical cord blood stem cells for cell replacement and repair therapies of the central nervous system. The various isolation protocols, phenotypic properties, and methods for in vivo and in vitro neural differentiation of mesenchymal stem cells/marrow stromal cells (MSC), hematopoietic stem cells (HSC), multipotent adult progenitor cells (MAPCs), and umbilical cord blood stem cells (UCBSC) will be discussed. Current progress regarding transplant paradigms in understanding disease models as well as in our transdifferentiation mechanisms will be presented.

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9/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.
```

18047259 PMID: 15972156

[Progress of study on placenta mesenchymal stem cells- review .]

Wu Jie-Ying; Zhang Yi

Guangzhou Maternal and Neonatal Hospital, Guangzhou Cord Blood Bank, Guangzhou 510180, China.

Zhongguo shi yan xue ye xue za zhi / Zhongguo bing li sheng li xue hui = Journal of experimental hematology / Chinese Association of Pathophysiology (China) Jun 2005, 13 (3) p514-7, ISSN 1009-2137 Journal Code: 101084424

Publishing Model Print

Document type: Journal Article

Languages: CHINESE
Main Citation Owner: NLM
Record type: In Data Review

#### [Progress of study on placenta mesenchymal stem cells- review .]

Recently mesenchymal stem cells have been successfully obtained from various sources of human body, including bone marrow, compact bone, peripheral blood, adipose tissue, cord blood, amniotic fluid and other fetal tissues. Placenta, as a temporary organ keeping substance exchange between mother and fetus, consisted of decidua basalis and chorion frondosum...

...adult stem cells. As a castoff after parturition, along with the ease of accessibility, lack of ethical concerns, placenta may be an attractive source of mesenchymal stem /progenitor cells for basic and clinical application. Therefore, the origin, isolation, characteristics and potential uses in future therapy are mainly reviewed in this paper.

#### 9/3,K/3 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

(c) format only 2005 Dialog. All rts. reserv.

15475468 PMID: 15373220

#### [Liver-targeted regenerative medicine]

Kobayashi Naoya; Yong Chen; Tanaka Noriaki

Department of Surgery, Okayama University Graduate School of Medicine and Dentistry, Okayama, Japan.

Nippon Geka Gakkai zasshi (Japan) Aug 2004, 105 (8) p440-4, ISSN 0301-4894 Journal Code: 0405405

Publishing Model Print

Document type: Journal Article; Review; English Abstract

Languages: JAPANESE
Main Citation Owner: NLM

Record type: MEDLINE; Completed

Recently, much attention has been drawn to liver-targeted regenerative medicine for the **treatment** of liver failure. Researchers in various fields consider that the following cells can be used for such **therapy**: human embryonic stem (ES) cells, somatic stem cells, hepatic stem cells, small hepatocytes, bone marrow— and **cord blood**—derived hepatic progenitor cells, and human hepatocyte cell lines. The Cre/loxP-based reversible immortalization of human hepatocytes is also introduced in this **review** article. Here we describe the candidates that can contribute to hepatic regeneration. This reversible immortalization system allows us to establish a highly safe human hepatocyte...

Descriptors: \*Cell Transplantation; \*Liver Failure- therapy --TH

```
(Item 1 from file: 5)
  9/3,K/4
DIALOG(R) File
               5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.
             BIOSIS NO.: 200300516369
0014561006
 Isolation and therapeutic potential of human haemopoietic stem cells.
AUTHOR: Clark Andrew D; Jorgensen Heather G; Mountford Joanne; Holyoake
  Tessa L (Reprint)
AUTHOR ADDRESS: Division of Cancer Sciences and Molecular Pathology, Royal
  Infirmary, University of Glasgow, Glasgow, UK**UK
AUTHOR E-MAIL ADDRESS: tlhlg@clinmed.gla.ac.uk
JOURNAL: Cytotechnology 41 (2-3): p111-131 2003 2003
MEDIUM: print
ISSN: 0920-9069 _(ISSN print)
DOCUMENT TYPE: Article; Literature Review
RECORD TYPE: Abstract
LANGUAGE: English
... ABSTRACT: vivo approaches have been described to isolate, genetically
  manipulate and expand pluripotent stem cell subsets. These techniques
  have been crucial to the development of gene therapy , and may allow
  adults to enjoy the potential advantages of cord blood transplantation.
  Recently, huge conceptual changes have occurred in stem cell biology. In
  particular...
...questioned and there is great excitement surrounding the potential
  plasticity of these cells, with the profound implications that this has,
  for developing novel cellular therapies. Mesenchymal
                                                         stem cells,
```

DESCRIPTORS:

...METHODS & EQUIPMENT: gene therapy -MISCELLANEOUS TERMS: ...Literature Review

#### 9/3,K/5 (Item 1 from file: 73)

DIALOG(R) File 73: EMBASE

directed to produce HSC...

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13272034 EMBASE No: 2005337970

# Biology of cord blood cells and future prospects for enchanced clinical benefit

multipotent adult progenitor cells and embryonic stem cells are potential

sources of cells for transplantation purposes. These cells may be

Broxmeyer H.E.

H.E. Broxmeyer, Department of Microbiology and Immunology, The Walther Oncology Center, Indiana University School of Medicine, Indianapolis, IN 46202 United States

Cytotherapy ( CYTOTHERAPY ) (United Kingdom) 2005, 7/3 (209-218)

CODEN: CYTRF ISSN: 1465-3249 DOCUMENT TYPE: Journal; Review

LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

NUMBER OF REFERENCES: 120

Cord blood (CB) has served as a clinically beneficial source of hematopoietic stem (HSC) and progenitor (HPC) cells for transplantation and correction of a large number of...

...disorders. The capacity of CB to perform these functions is intimately related to the quality and quantity of HSC and HPC present in CB. This review covers the biology of HSC and HPC, efforts to expand these cells ex

```
vivo for enhanced clinical utility that has thus far not been very...
...enhance the homing and engrafting capability of HSC as an alternative means for more effective use of the limited numbers of CB cells collected. This review also highlights the presence in CB of mesenchymal stem cells, unrestricted somatic stem cells , endothelial progenitor cells and immune cells. The presence and biology of these non-HSC/HPC may open up future possibilities for additional clinical benefit of...
MEDICAL DESCRIPTORS:
```

hematopoietic stem cell; malignant neoplastic disease-- therapy --th; ex vivo study; cell count; cell density; mesenchymal stem cell; somatic cell; endothelium cell; immunocompetent cell; cell type; cryopreservation; human; nonhuman; review

```
9/3,K/6
             (Item 2 from file: 73)
DIALOG(R) File 73: EMBASE
(c) 2005 Elsevier Science B.V. All rts. reserv.
            EMBASE No: 2003350849
12239431
 Current views on stem cell biology and plasticity
 E. Kansu, Hematopoietic Stem Cell T. U., Institute of Oncology, Hacettepe
 Univ. Faculty of Medicine, Ankara Turkey
  Turkish Journal of Cancer ( TURK. J. CANCER ) (Turkey)
                                                           2003, 33/2
  (69-74)
 CODEN: TJCAF ISSN: 1019-3103
 DOCUMENT TYPE: Journal ; Review
 LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
 NUMBER OF REFERENCES: 46
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...formed by the body to replace worn out cells in tissues and organs. Hematopoietic stem cells (HSCs) are present in peripheral blood, bone marrow and **cord** - **blood** and are capable to give rise to blood and immune system cells. HSCs can be enriched using several techniques and can be cultured in clonogenic...

...vivo and can be induced to differentiate to all cell lineages in vivo, and can be induced to differentiate to most cell types in vitro.

Mesenchymal Stem Cells were also identified and it was shown that when bone marrow is plated in fetal calf serum containing medium, colonies of adherent fibroblast like...

...differentiate into bone and adipocytes. Embryonic stem cells have been utilized in applied research to provide a source of stem cells for the amelioration and treatment of human diseases which can not be treated by conventional techniques and modalities. The ability of tissue-specific stem cells to differentiate to cell types...
MEDICAL DESCRIPTORS:

...cell culture; clonogenesis; embryo cell; blastocyst; cell lineage; mesenchyme cell; culture medium; fibroblast; bone; adipocyte; Parkinson disease; Alzheimer disease; diabetes mellitus; spinal cord injury; osteoarthritis; graft rejection; transplantation; fetal calf serum; human; review?

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Set Items Description

S1 209 (MESENCHYMAL (W) (STEM OR PROGENITOR OR PRECURSOR)) (S) ((-
CORD OR PLACENTA OR NEWBORN) (W) BLOOD)

S2 32 (SOMATIC (W) STEM (W) CELL?) (S) (CORD (W) BLOOD)
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S3
          229
                S1 OR S2
               S3 AND (TREATMENT OR THERAPY OR TRANSPLANT OR GRAFT)
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               S4 AND (CARDIAC OR HEART OR (SMOOTH (W) MUSCLE))
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                RD (unique items)
           77
               S4 NOT S5
s7
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               RD (unique items)
               S8 AND (REVIEW? OR PERSPECTIVE?)
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S9
S S8 NOT PY>2000
              49 S8
         7450193 PY>2000
     S10
              1 S8 NOT PY>2000
?
T S10/3, K/ALL
               (Item 1 from file: 5)
  10/3,K/1
DIALOG(R)File
              5:Biosis Previews(R)
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0013127312
             BIOSIS NO.: 200100299151
 Effects of mesenchymal stem cell (MSC)-based versus cytokine-based
 umbilical cord blood (UCB) short term expansion on graft□CD34 and□
 accessory cell number and function
AUTHOR: Bos L S; Mandel D; Kadereit S; Haynesworth S E; Koc O N; Szekely E;
  Daum-Woods K; Kulchycki L; Jin W; Laughlin M J
JOURNAL: Blood 96 (11 Part 2): p114b November 16, 2000 2000
MEDIUM: print
CONFERENCE/MEETING: 42nd Annual Meeting of the American Society of
Hematology San Francisco, California, USA December 01-05, 2000; 20001201
SPONSOR: American Society of Hematology
ISSN: 0006-4971
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English
 Effects of mesenchymal stem cell (MSC)-based versus cytokine-based
 umbilical cord blood (UCB) short term expansion on graft□CD34 and□
 accessory cell number and function
...ABSTRACT: with (cyto alone) (cpm 7055-19,552; stimulation index 8.6-9).
  In summary, (MSC+cyto)-based UCB expansion augments early CD34+
  populations and maintains graft T cell populations proliferation when
  compared with (cyto alone).
DESCRIPTORS:
  ...METHODS & EQUIPMENT: cytokine-based, mesenchymal
                                                         stem cell-based,
     therapeutic method
 MISCELLANEOUS TERMS:
                         ... graft CD34 function...
... graft CD34 number
2
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             CORD OR PLACENTA OR NEWBORN) (W) BLOOD)
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                (SOMATIC (W) STEM (W) CELL?) (S) (CORD (W) BLOOD)
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                S1 OR S2
                S3 AND (TREATMENT OR THERAPY OR TRANSPLANT OR GRAFT)
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S4 AND (CARDIAC OR HEART OR (SMOOTH (W) MUSCLE))
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                  S4 NOT S5
             49
                  RD (unique items)
· S8
 S9
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                  S8 AND (REVIEW? OR PERSPECTIVE?)
                  S8 NOT PY>2000
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| <u>L2</u>       | (mesenchymal adj (stem or precursor or progenitor)) same (cord or placenta or newborn) | 316   | <u>L2</u>          |
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